

Notice of Allowability	Application No.	Applicant(s)	
	10/670,213	BARNWELL, JAMES W.	
	Examiner	Art Unit	
	Ljiljana (Lil) V. Ciric	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the reply filed on 27 April 2006 and the telephonic interview of 10 July 2006.
2. ☒ The allowed claim(s) is/are 28-34, 46-49 and 51-58.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20060710</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


LJILJANA CIRIC
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Agent Annette K. Kwok, Registration No. 58,278, on July 10, 2006.

2. The application has been amended as follows:

In the specification:

Paragraph [0034], line 1: Delete "braised" and replace with --brazed--.

Paragraph [0036], line 1: Delete "braised" and replace with --brazed--.

In the claims:

Claim 28, line 4: Immediately following "stacked plates", insert --, a first gap disposed between two of said stacked plates--.

Claim 28, lines 5-7: Delete "a phase change material contained within a first gap between one of said stacked plates and another of said stacked plates, and with no phase change material located in or around the air/air heat exchanger", and replace with --an organic paraffin contained within said first gap--

Claim 29, line 1: Immediately preceding "wherein", insert --further comprising a second gap disposed between another two of said stacked plates,--.

Claim 29, lines 2-3: Delete "a second gap between one of said stacked plates and another of said stacked plates" and replace with --said second gap--.

Cancel claims 35 through 45.

Claim 48, lines 1-2: Delete "wherein the phase change material is in the first gap".

Claim 49, line 1: Delete "phase change material" and replace with --organic paraffin--.

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Cancel claim 50.

Claim 51, line 6: Immediately following “a series of brazed plates”, insert –and a paraffin wax contained between said brazed plates--.

Claim 51, line 8: Delete “a” immediately preceding “piping”.

Claim 52, lines 1-2: Delete “air being dried in a first gap located between one of the brazed plates and another of the brazed plates” and replace with –a first gap located between two of said brazed plates, wherein air is dried in said first gap--.

Claim 53, lines 1-3: Delete “phase change material contained within a second gap located between one of the brazed plates and another of the brazed plates”, and replace with –a second gap located between another two of said brazed plates, wherein said paraffin wax is contained within said second gap--.

Claim 54, lines 1-2: Delete “refrigerant contained within a third gap located between one of the brazed plates and another of the brazed plates”, and replace with –a third gap located between yet another two of said brazed plates, wherein refrigerant is contained within said third gap--.

Claim 55, line 1: Delete “wherein the phase change material is contained in the second gap,”.

Claim 55, line 2: Immediately preceding “third gap”, insert –the--.

Claim 58, line 2: Immediately following “heat exchanger”, insert –system--.

3. The replacement drawings were received on April 27, 2006. These drawings are hereby approved.

Kitamura et al. and Tomita et al. each discloses a vehicular heat exchanger system including a phase change material such as wax disposed between two plates of a brazed air-to-refrigerant heat exchanger.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. The examiner hereby notes that, contrary to the statement made by the agent summarizing the personal interview of April 26, 2006, the examiner did NOT propose the negative limitation “with no phase change material located in or around the air/air heat exchanger”, but merely noted that the phase

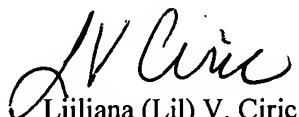
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change material of the instant invention, unlike that of the Mantegazza et al. reference, is disposed solely in the air/refrigerant heat exchanger.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner can normally be reached on Mondays through Fridays from 10:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel, can be reached at 571-272-4929.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ljiljana (Lil) V. Ciric
Primary Examiner
Art Unit 3753

Approved
JVC
7-7-06

Replacement Drawing

FIG. 1

